

Anti-Neuropilin-2 Antibody
Catalog # ABO11078**Specification**

Anti-Neuropilin-2 Antibody - Product Information

Application	WB
Primary Accession	O60462
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Neuropilin-2(NRP2) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Neuropilin-2 Antibody - Additional Information

Gene ID 8828

Other Names

Neuropilin-2, Vascular endothelial cell growth factor 165 receptor 2, NRP2, VEGF165R2

Calculated MW

104859 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Rat, Human, Mouse

Subcellular Localization

Membrane; Single-pass type I membrane protein.

Protein Name

Neuropilin-2

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human NRP2(45-60aa YPQDYPSHQNCEWIVY), identical to the related mouse sequence and different from the related rat sequence by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the neuropilin family.

Anti-Neuropilin-2 Antibody - Protein Information

Name NRP2

Synonyms VEGF165R2

Function

High affinity receptor for semaphorins 3C, 3F, VEGF-165 and VEGF-145 isoforms of VEGF, and the PLGF-2 isoform of PGF.

Cellular Location

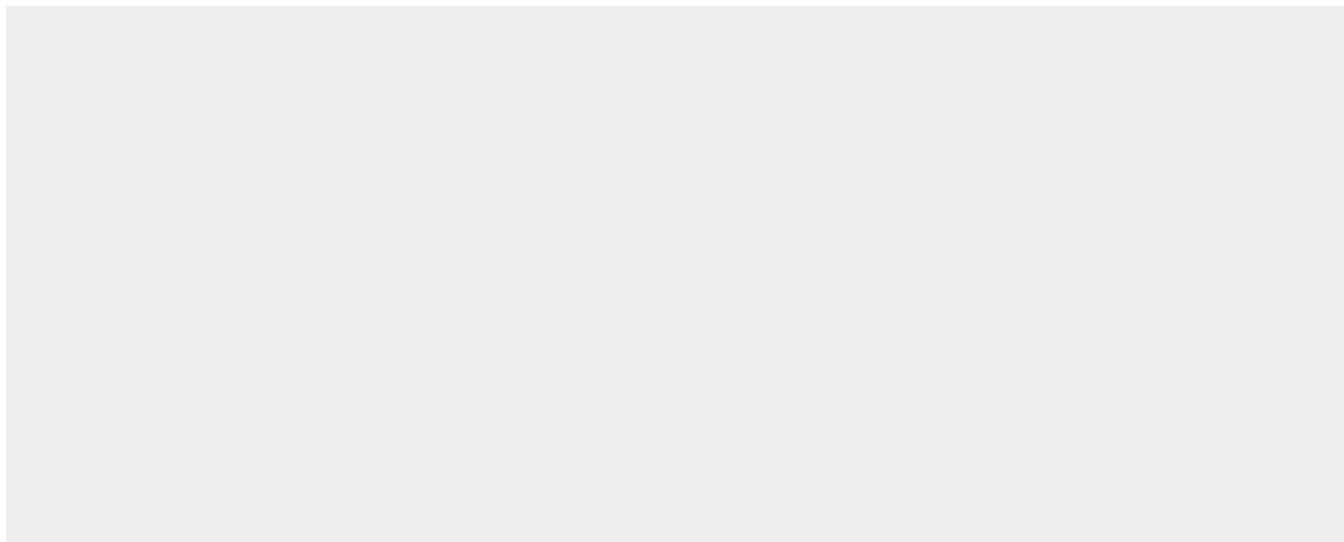
Membrane; Single-pass type I membrane protein

Anti-Neuropilin-2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Neuropilin-2 Antibody - Images





Anti-NRP2 antibody, ABO11078, Western blotting All lanes: Anti NRP2 (ABO11078) at 0.5ug/ml
Lane 1: Rat Brain Tissue Lysate at 50ug
Lane 2: Rat Testis Tissue Lysate at 50ug
Predicted bind size: 105KD
Observed bind size: 105KD

Anti-Neuropilin-2 Antibody - Background

NRP2 (Neuropilin-2), also called Npn2 or VEGF165R2, encodes a member of the neuropilin family of receptor proteins. The soluble NRP2 was secreted as a 62.5-kD protein following transfection in Chinese hamster ovary cells. The NRP2 gene is mapped on 2q33.3. The NRP2 gene contains 17 exons and spans about 112 kb. Sema3b can act to repulse axons expressing neuropilin-2 and can antagonize the repulsive action of Sema3a on axonal growth cones expressing neuropilin-1. This protein may play a role in cardiovascular development, axon guidance, and tumorigenesis. Mice with null mutations in genes encoding Sema3F, and its holoreceptor components Npn2 and plexin A3 (PLEXA3), exhibit increased dentate gyrus granule cell and cortical layer V pyramidal neuron spine number and size, and also aberrant spine distribution. Moreover, Sema3F promotes loss of spines and excitatory synapses in dissociated neurons in vitro, and in Npn2-null brain slices cortical layer V and dentate gyrus granule cells exhibit increased miniature excitatory postsynaptic current frequency. These disparate effects of secreted semaphorins are reflected in the restricted dendritic localization of Npn2 to apical dendrites and of Npn1 to all dendrites of cortical pyramidal neurons.